

PETROLEUM STORAGE TANK RELEASE TRUST FUND

MONITORING

REQUEST FOR PROPOSAL



Kansas Department of Health and Environment

Bureau of Environmental Remediation

Storage Tank Section



K A N S A S

RODERICK L. BREMBY, SECRETARY

DEPARTMENT OF HEALTH AND ENVIRONMENT

KATHLEEN SEBELIUS, GOVERNOR

February 21, 2005

Prospective Bidders,

There have been numerous revisions to the Monitoring Bid Request for Proposal (RFP). The current RFP is Revision 4, 03/2005. This RFP is effective March 1, 2005 for all monitoring bids. As an addendum to the original bid contract, all monitoring renewals will be conducted in accordance with the requirements in the new RFP. Please review this document in its entirety and be sure to utilize this document while preparing your proposals. The RFP is available on the internet at www.kdhe.state.ks.us/tanks/rfp.

If you have any questions regarding this document, please feel free to contact me at (785) 296-0699.

Sincerely,

A handwritten signature in black ink, which appears to read "R. Trevor Flynn".

R. Trevor Flynn
Unit Chief, Monitoring Unit
Storage Tank Section
Bureau of Environmental Remediation

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SECTION 1.0 PROPOSAL PROCESS INFORMATION

1.1 PURPOSE

On behalf of the Owner/Operator (O/O), the Kansas Department of Health and Environment (KDHE) is soliciting bids from qualified Vendors to implement a groundwater monitoring plan. The plan is designed to track the levels of contaminants detected at the site.

1.2 OBJECTIVES

- 1.2.1 To provide information necessary for the preparation of competitive proposals by qualified Vendors.
- 1.2.2 To provide for a fair and objective evaluation of proposals.
- 1.2.3 To result in a contract between the O/O and the Vendor to provide the services as described in Sections 3.0 and 4.0 of this Request for Proposal (RFP).

1.3 DEFINITIONS

- 1.3.1 "Corrective Action" means all action necessary to contain, collect, control, identify, analyze, clean up, treat, disperse, remove, or dispose of soils and groundwater contaminated by a release of petroleum products from a storage tank.
- 1.3.2 "Hazardous substance" shall have the meaning ascribed to such term by section 101 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 of the United States as in effect on January 1, 1992.
- 1.3.3 "Release" means any spilling, leaking, pumping, pouring, emitting, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, including the abandonment or discarding of barrels, containers, and other closed receptacles containing any Hazardous substance.
- 1.3.4 "Petroleum" means petroleum, including crude oil or any fraction thereof, which is liquid at standard conditions of temperature and pressure, including but not limited to: gasoline, gasohol, diesel fuel, fuel oils and kerosene.
- 1.3.5 "Other pollutant" means any substance determined by the Secretary of Health and Environment that poses a substantial present or potential hazard to human health or the environment when released. The term does not include radioactive materials regulated by K.S.A. 48-16-01 et seq.
- 1.3.6 "Vendor" means any individual, partnership, association or corporation who is seeking or is chosen to enter into a procurement contract with the O/O.
- 1.3.7 "Project Manager" means the KDHE staff geologist or environmental scientist designated to be the

lead technical interface with the Vendor.

- 1.3.8 "Field Geologist" is the designated site representative for the Vendor. This position works under the direct supervision of the Vendor's designated "Licensed Professional". Minimum qualifications for this position are:
- 1) Has a BS degree in Geology from an accredited four year college or a related degree with a minimum of 30 semester hours of geologic course work.
 - 2) Has overseen drilling activities and has described and recorded the subsurface lithology during the drilling of at least 21 boreholes.
- 1.3.9 "Licensed Professional" is the designated site representative for the Vendor, or the designated supervisor of the Vendor's "Field Geologist(s)". Minimum qualifications for this position are 1) must have a valid and current professional license through the Kansas State Board of Technical Professions, and 2) must be technically qualified to interpret geologic data. This position is responsible for the preparation and certification of all geological information in reports and on maps.
- 1.3.10 "Sampling Technician" means a Vendor representative qualified to perform certain on-site activities as specified in the RFP. In order to meet the minimum qualifications for a sampling technician, the individual must have: 1) OSHA 40 Hour Hazardous Material training and annual 8 Hour refresher training, 2) knowledge of EPA/KDHE sampling protocol, and 3) collected laboratory groundwater samples from at least 30 monitoring wells.
- 1.3.11 "Trained Professional" The minimum qualifications for this position are a Bachelor's degree from an accredited four year college or a related degree with a minimum of 30 hours of geologic, hydrogeologic or environmental science course work.
- 1.3.12 "Landscaping Professional" means an individual or company that engages in landscaping activities as a primary or substantial source of revenue. A Landscape Professional must possess a tax ID number and liability insurance under the company name. The landscaping professional cannot be an employee of the general contractor.
- 1.3.13 "Project Geologist" is the designated site representative for the Vendor, or the designated supervisor of the Vendor's "Field Geologist(s)". Minimum qualifications for this position are 1) all the minimum qualifications for a "Field Geologist", and 2) currently a Licensed Geologist in the state of Kansas. This position is responsible for the preparation and certification of all geological information in reports and on maps.

1.4 INQUIRIES

- 1.4.1 All inquiries concerning this RFP must be submitted in writing to:

Petroleum Storage Tank Release Trust Fund
1000 SW Jackson, Suite 410

Topeka, KS 66612-1367

Attn: Monitoring Unit

FAX: (785) 296-6190

1.4.2 Answers to all written questions will be distributed to all participating prospective Vendors by mail.

1.4.3 In all cases, no verbal communication will override written communications and only communications in writing are binding.

1.5 REVISIONS TO THE REQUEST FOR PROPOSAL

In the event it becomes necessary to revise any part of this RFP, revisions will be provided in writing to all Vendors to whom KDHE has sent the RFP.

1.6 SUBCONTRACTORS

If the Vendor intends to subcontract any part of the work to be performed under this RFP, the Vendor must include, in its proposal, a complete list of potential subcontractors and a description of the work to be subcontracted. The Vendor is responsible for assuring that its subcontractors possess all licenses and/or certifications as required by the State of Kansas for the services they will provide.

1.7 SUBMISSION OF PROPOSAL

Two (2) sealed copies of the proposal must be received by the Petroleum Storage Tank Release Trust Fund no later than 3:00 p.m. on the date specified on the Project Bid Proposal Cover Sheet and the Project Bid Proposal Sheet(s). Proposals should be addressed to:

Petroleum Storage Tank Release Trust Fund

1000 SW Jackson, Suite 410

Topeka, KS 66612-1367

Attn: Contractual Services Unit

The proposal must include costs for all tasks necessary to complete the specified scope of work in accordance with all requirements outlined in the RFP.

1.7.1 The outside of the envelope must be marked "**SEALED BID**" in bold lettering. The bid number(s) of the enclosed bid(s) must be displayed on the outside of the envelope. All bids sent in the same envelope must have the same bid deadline. Failure to properly mark the outside of the envelope may result in the bid(s) being disqualified.

1.7.2 Late proposals will not be opened. A letter notifying the Vendor, and documentation that the proposal was received after the deadline, will be mailed to the Vendor. The proposal will be stored in KDHE files for a period of one year beyond the closing date for the bid.

1.7.3 KDHE and/or the O/O will not pay for any information herein requested, nor are they liable for any

costs incurred by the Vendor to prepare or submit a proposal.

1.7.4 Proposals must be in duplicate and include the following completed documents:

- 1) Bid Proposal Cover Sheet with Vendor Information.
- 2) Exhibit 2 Project Bid Summary Sheet (multiple site bids only).
- 3) Exhibit 2 Project Bid Proposal Sheet(s). The vendor's name must appear at the top of each sheet in the designated place.
- 4) List of all proposed subcontractors, major equipment suppliers, and analytical laboratories.

Proposals must be neat and legible. Proposals that are not properly submitted and/or are not complete will be disqualified.

1.8 WITHDRAWAL OF BIDS

A Vendor may withdraw a bid at any time prior to the scheduled closing time for receipt of proposals.

1.9 PROPOSAL OBLIGATIONS

The contents of the proposal and any clarification thereto submitted by the successful Vendor shall become part of the contractual obligation and will be incorporated by reference into the ensuing contract.

1.10 TERM OF PROPOSAL

All proposals shall be firm for a period of ninety (90) days after the proposal due date to allow time for evaluation of all proposals and to make an award.

1.11 DISPOSITION OF PROPOSALS

All proposals become the property of the State of Kansas upon receipt and will not be returned to the Vendor. The State of Kansas shall have the right to use all ideas or adaptation of ideas contained in any proposal received in response to this RFP. Selection or rejection of the proposal will not affect this right.

1.12 NOTIFICATION OF APPROVED COSTS

After evaluation of the proposals, all Vendors who submitted proposals will be notified in writing of the approved costs for the Project.

1.13 EVALUATION CRITERIA

Due to the variable nature of sites being monitored, bids will be reviewed to ensure that line item costs are equitably distributed across all required tasks. Prices must accurately reflect the actual cost to complete each segment of the project because additional scopes of work may be required. To avoid the potential problem of Vendors unfairly "loading" costs into certain categories to avoid cost proration, KDHE Trust Fund bid proposals will be evaluated on a line item basis. KDHE will review individual line item rates with

respect to bids from other Vendors for the same project, and to historical costs.

An explanation of all higher or lower than published reasonable line item costs must be included with the proposal. If an explanation is not submitted with the original bid, or the explanation is deemed to be inadequate, the bid may be rejected as unresponsive. The fact that previous bids may have been approved with unreasonable line item costs does not mean that future bids with similar costs will be approved.

The following procedure must be used in preparing the bid package:

If a line item unit rate is bid as zero (0) or is left blank, and the activity associated with that line item is required to complete the scope of work, the bid will be rejected as unresponsive.

The unit rate and line item total cost should be entered as "Included" (INC) if the unit cost for that line item is included in the rate for another line item. The line item in which it is included must be specified.

The unit rate and line item total cost should be entered as "NC" if it is proposed to perform the activity at no cost. "NC" will be taken to mean that the no charge rate will apply not only to the original scope of work, but will also apply to any additional scope of work within the geographic area.

KDHE reserves the right to approve or deny proposed rates and/or quantities on a line item basis. If deemed to be in the best interest of the O/O and the State, KDHE may propose reduced but reasonable (as determined by KDHE using the criteria above) costs for specific line items, and approve the revised total project cost. If the Vendor is not willing to perform the task(s) at the reasonable rate, they may withdraw their bid. KDHE will not allow costs to be moved between line items to meet the reasonable cost requirement after the bid closing date.

In addition to the above described line item cost evaluation, proposals will be evaluated on the Vendor's 1) total cost as submitted on the Project Bid Proposal Sheets, 2) experience, 3) expertise, and 4) past performance on KDHE Trust Fund Sites. The final determination of approved costs for the project will be in the best interest of the O/O and KDHE.

1.14 CONFLICTS OR AMBIGUITIES

Vendors shall notify KDHE immediately if conflicts or ambiguities are found in the Request For Proposal. Failure to do so prior to the specified closing date may result in these items being resolved in a manner deemed to be in the State's best interest as judged by the KDHE Storage Tank Staff.

SECTION 2.0 CONTRACT INFORMATION

2.1 PURPOSE

This section outlines the type of contract contemplated and sets forth contract clauses that must be contained in any resultant contract.

2.2 CONTRACT DOCUMENT

- 2.2.1 The Contract between the O/O and Vendor shall consist of, at a minimum, the following: 1) This RFP and any amendments thereto, 2) the Vendor's proposal submitted in response to the RFP, and 3) the Contractual Provisions form # O/O 101, 7/92 (see ATTACHMENT G) or equivalent.
- 2.2.2 For the purpose of contract uniformity, the O/O's standard form contract and Contractual Provisions (ATTACHMENT G) may be utilized.
- 2.2.3 In the event of any inconsistency or contradiction between this RFP and the Vendor's proposal and/or contract form, the provisions of this RFP are controlling regarding reimbursement to be provided by KDHE.
- 2.2.4 The contract between the O/O and the Vendor will be signed by both parties within 14 days following approval of costs.

2.3 RESPONSIBILITIES

- 2.3.1 The O/O is responsible for assuring the monitoring program is conducted in accordance with the KDHE specification described in SECTIONS 3.0, 4.0, and 5.0.
- 2.3.2 The O/O and the Vendor selected to perform this scope of work are responsible for maintaining the initial project costs approved by KDHE. Any change to the value of this contract will be in accordance with the Vendor's proposed unit pricing and must be approved in writing by KDHE prior to the Vendor commencing work. KDHE reserves the right to deny any changes.
- 2.3.3 The O/O and the Vendor are responsible for securing and complying with any and all federal, State of Kansas and local permits and regulations regarding the Scope of Work defined in this RFP.

2.4 ERRORS IN PREPARATION

The Vendor is responsible for any mathematical error or incorrect extension of any calculations in the Vendor's price quotes. In case of discrepancies, the Vendor unit cost will be multiplied by the units provided and the resultant unit price will be used in the evaluation. Any proposal with an error will be disqualified if there is a five percent or less difference between it and the next lowest qualified proposal. If the percent difference is greater than five percent, the corrected amount will be considered the Vendor's submission and be subject to approval.

2.5 CONTRACT AMENDMENTS

Any modification, amendment or extension to a contract resulting from this RFP must be in writing. The O/O must receive prior written approval from KDHE for the changes. KDHE reserves the right to deny any modifications, amendments, or extensions.

2.6 COMPLIANCE WITH LAW

The Vendor agrees to comply with all applicable federal, state, and local laws, rules regulations and ordinances; and all provisions required thereby to be included herein, are hereby incorporated by reference. The Vendor agrees to indemnify and hold the O/O and KDHE harmless from any loss, damage, or liability resulting from the violation on the part of the Vendor of such laws, rules, regulations, or ordinances.

2.7 SEVERABILITY

The invalidity in whole or part of any provision of the contract shall not void or affect the validity of any other provision.

2.8 ASSIGNMENT, TRANSFER, CONVEYANCE, SUBCONTRACT, AND DISPOSAL

The Vendor shall not assign, transfer, convey, subcontract, or dispose of any contract resulting from this RFP, or its rights, title, interest, or power to execute such assignments to any other person, company, corporation, or entity without written consent of the O/O and KDHE.

2.9 INSURANCE

The Vendor shall maintain, at its expense during the term of the contract, the following insurance covering the services to be performed under this contract:

2.9.1 Workmen's compensation-statutory

2.9.2 Employers liability insurance in the minimum amount of \$500,000.00 per occurrence with a \$1,000,000.00 aggregate.

2.9.3 Comprehensive general liability insurance of \$1,000,000.00 per occurrence with a \$1,000,000.00 aggregate.

2.9.4 Vehicle liability (property damage and bodily injury combined) insurance of \$500,000.00 per occurrence.

2.9.5 Professional liability insurance of \$1,000,000.00 per occurrence with a \$1,000,000.00 aggregate.

2.9.6 The successful Vendor will provide the O/O, within twenty (20) working days of the contract signing, a certificate of insurance (Accord Form 25-S) naming the O/O as the certificate holder.

The cancellation clause of the Accord Form will read as follows:

"Should any of the above described policies be cancelled before the expiration date thereof, the issuing company will endeavor to mail 10 days written notice to the certificate holder named to the left, but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives."

A copy of this document must be provided to the KDHE within the same 20 working days period.

2.10 INDEMNIFICATION

Neither the O/O nor KDHE shall be liable for any damage or compensation payable by law in respect to or in consequence of any accident or injury to any worker or other person in the employment of the Vendor or any subcontractor, save and except an accident or injury resulting from a willful negligent act or default of the O/O or KDHE.

The Vendor shall indemnify and keep indemnified the O/O and KDHE against all such damages and compensation, save and except as aforesaid, and against all claims, proceedings, costs, charges, and expenses whatsoever in respect thereof or in relation thereto.

2.11 COMMUNICATION AND NOTICES

Any written notice to the Vendor shall be deemed sufficient when deposited in the United States mail, postage prepaid, and addressed to the Vendor at its address listed on the signature page of the contract or at such address as the Vendor may have requested in writing, or which is hand carried and presented to an authorized employee of the Vendor at its address as listed on the signature page of the contract.

2.12 TERMINATION

2.12.1 Termination for cause

The O/O or the Vendor may terminate the contract resulting from this RFP at any time when either Party fails to carry out its obligations under the provisions of this RFP or fails to make substantial progress under the terms specified in the RFP and the resulting proposal and contract.

2.12.2 The O/O shall provide the Vendor with written notice of conditions adversely affecting performance. If after such notice the Vendor fails to remedy the conditions contained in the notice within ten (10) days, the O/O may issue the Vendor an order to stop work immediately and exercise their right to terminate the contract.

2.12.3 The Vendor shall provide the O/O with written notice of conditions adversely affecting performance. If after such notice the O/O fails to remedy the conditions contained in the notice within ten (10) days, the Vendor may exercise their right to terminate the contract.

2.12.4 The O/O shall be obligated only for the services performed in accordance with the RFP specifications prior to the date of termination notice.

2.13 WAIVER

In the event of breach of contract or any provision thereof, the failure of the O/O to exercise any of its rights or remedies under this contract shall not be construed as a waiver of any such provision of the contract breached or as an acquiescence in the breach. The remedies herein reserved shall be cumulative and additional to any other remedies at law.

SECTION 3.0 STATEMENT OF WORK

3.1 GENERAL INFORMATION

- 3.1.1 The following information is provided to assist the O/O in obtaining proposals for the scope of work necessary to accomplish the goals outlined herein.
- 3.1.2 The Vendor may modify the scope of work; however, all modifications and justification for the modifications must be identified as such in the proposal. Modifications to the proposal must be approved in writing by KDHE prior to the initiation of work.
- 3.1.3 Vendor is responsible for insuring that work performed under this contract complies with all applicable standard operating procedures (SOP's) as included in KDHE-Division of Environment Quality Management Plan (QMP) or directed by the KDHE Project Manager if it is determined by the KDHE that more rigorous operating procedures are warranted. The KDHE-Division of Environment (QMP) can be obtained from KDHE or from the KDHE website at <http://www.kdhe.state.ks.us/ber>.
- 3.1.4 KDHE reserves the right to reject any modification to proposals.
- 3.1.5 Definitions of line items in the Project Bid Proposal Sheet and Work Specific terms can be found in SECTION 6.0 of this bid package.
- 3.1.6 The KDHE Project Manager or their supervisor will be notified **immediately by telephone** if any contamination is detected in any public or private drinking supply well or if the well is found to be in danger of being impacted during the current monitoring event. KDHE must be notified by telephone if damage to any of the monitoring wells presents a significant threat to the aquifer or poses a hazardous situation.

3.2 SITE INFORMATION

- 3.2.1 Review the site specific information for each site in EXHIBIT 1. Conduct the work described therein following the requirements outlined in this document.

3.3 MONITORING SCOPE OF WORK

3.3.1 Monitoring Goals

- 3.3.1.1 Complete the monitoring program in accordance with all requirements outlined in this document.
- 3.3.1.2 Obtain and develop sufficient data during the monitoring so the potential risk to the environment and human health can be evaluated and a recommendation can be made regarding future work to be conducted at the site.
- 3.3.1.3 The Vendor is responsible for meeting the Goals outlined in this section and Section 4.0, Deliverables.

3.3.2 Monitoring Work Scope and Renewal Scope of Work

- 3.3.2.1 All groundwater sampling must be performed by a qualified Sampling Technician as defined in SECTION 1.3.10. All field equipment utilized must be in proper working condition.
- 3.3.2.2 One groundwater sample will be collected from each of the wells indicated in the site specific information (SSI). All groundwater samples for the same site will be collected within the same 24 hour period. All groundwater samples will be obtained within 45 days of the report due date unless otherwise specified by the Project Manager. The frequency of the sampling events must be as specified on the SSI or the renewal cost sheet, unless amended in writing by the KDHE Project Manager.
- 3.3.2.3 Install new bailers and twine during the first event, to collect groundwater samples for each event of the current scope of work. For renewals, the wells to be sampled will be indicated on the approval letter.
- 3.3.2.4 All monitoring wells must be properly purged by removing as close to three well volumes of water prior to sampling as possible. Total depths must be measured on the first sampling event to document any changes and be used to properly calculate purge volume requirements. When water yield is adequate, the well should be purged and sampled prior to the sampler moving on to the next well to help reduce the possibility of cross contamination. Purging of low yield wells will require the Vendor to manage field activities such that approved staff time is utilized to maximize the amount of purge water that is removed from each well.

In low yield wells, the Vendor must allow the groundwater to return as close as possible to static conditions before taking a groundwater sample for analysis.

If static conditions are not attained or if 3 well volumes of water cannot be purged before groundwater samples are taken, the Vendor must document the reasons within the field notes.

Monitoring Wells must be gauged, purged and sampled in the order (based on historical data) from least contaminated to most contaminated. Ideally, each well should be gauged, purged and sampled prior to the sampler moving on to the next well. The Sampling Technician is required to wear disposable sampling gloves and change them in between each well to limit the possibility of cross contamination. All non-dedicated sampling equipment must be decontaminated between wells. Sampling must be conducted in accordance with the KDHE BER Standard Operating Procedures.

- 3.3.2.5 Groundwater samples will not be collected for laboratory analysis if measurable (greater than .01') separate phase hydrocarbon product is present in the well. The Vendor shall document in their field notes the complete description of the product, including thickness of the product layer, color, odor, viscosity, and indicate the type of product suspected. If product is discovered for the first time at any active facility the owner of the facility should be notified.
- 3.3.2.6 If indicated on the site specific information or renewal cost sheet, a sample of the hydrocarbon product will be collected from the well and will be analyzed by a KDHE certified laboratory. The analysis will indicate the type of fuel detected and the Vendor will include a copy of the analysis and chromatogram obtained from the laboratory.
- 3.3.2.7 All laboratory analyses will be performed by a laboratory certified by KDHE for the specific analyte and laboratory method, if certification is available for the proposed method, as outlined in ATTACHMENT C. Groundwater samples will be submitted for laboratory analysis for the following: benzene, toluene, ethylbenzene, xylenes (TEX.), 1,2 DCA, naphthalene, and MtBE. Other analyses may be required if indicated on the SSI or renewal cost sheet.
- 3.3.2.8 All samples designated for laboratory analysis will immediately, upon collection, be containerized and sealed in a laboratory approved sample container for the constituent(s) of concern, and will be properly preserved and transported to the laboratory. Sample labels must include project name, sampling technicians name, well ID #, and date and time of collection. Proper Chain-of-Custody procedures must be maintained. Product samples will be transported in a separate container from groundwater and soil samples.
- 3.3.2.9 Collect static water level measurements for groundwater elevation data from each monitoring well, during each sampling event to determine current hydraulic gradient and groundwater flow directions. Static water levels and free product (if applicable) must be gauged from the North side of the top of casing or other permanently marked reference point were the top of the well casing was surveyed. The well gauging must be measured to .01' accuracy. If a well is gauged dry, the gauged measurement must include the current measured total depth.
- 3.3.2.10 An attempt must be made to locate all wells to be sampled utilizing a metal detector and existing survey data. All attempts must be documented in the field notes.
- 3.3.2.11 One trip blank will accompany each sample container. Trip blanks should be obtained from the lab performing the analysis. Costs for analysis of any and all samples for which the required

QA/QC data (see appendix 1) have not been submitted will not be eligible for reimbursement. If the analytical results from the Vendor's subcontracting laboratory cannot be confirmed by the QA/QC data, the Vendor may be required to resample all monitoring wells at the Vendors' expense.

3.3.2.12 If indicated on the site specific information sheet, the removal of separate phase product may be required. All product removed from the site must be recycled and the KDHE project manager must be notified and approve of the recycling facility. Recovered separate phase product must be containerized, transported and stored in accordance with all local, state and federal laws. Free product recovery activities must be done on a separate event from sampling activities to minimize potential cross contamination.

3.3.2.13 Notify KDHE personnel at least **three business days prior to sampling on 50%** of the monitoring events where the sampling times must be during normal KDHE business hours (Monday through Friday) to provide KDHE with the opportunity to provide oversight and collect split samples. Notifications (ATTACHMENT E) must be faxed, emailed or mailed to the attention of the KDHE Project Manager and the associated district office. Notifications must include the site name, KDHE project code, date to be sampled, approximate time the Vendor will be on-site for sampling, and the sampling technician's cell phone number. The KDHE Project Manager and the designated District Office Representative shall be notified by telephone, fax, or email if there are any revisions to the original notification. Costs for the monitoring event may be denied if KDHE is not notified as specified in this RFP. Sites may not be renewed with the current Vendor if the notification requirement is not met. The Vendor is responsible to notify the appropriate site contacts and property owners to ensure well accessibility prior to the sampling event.

3.3.2.14 Label the final report for the monitoring scope of work as the Final Report. Within the final report; summarize all observations of the analytical results, groundwater elevation, and groundwater flow for the time period covered in the scope of work. A recommendation for closure, further monitoring, or corrective action must be included in the final report.

3.3.2.15 A completed monitoring event summary page (ATTACHMENT D) will be included with each invoice and RFR in order for monitoring costs to be reimbursed. An incomplete or missing summary page may delay or prevent reimbursement.

3.3.2.16 The Vendor and the KDHE Project Manager may negotiate the first report due date for renewals.

3.3.3 Waste Disposal

3.3.3.1 Purge water must be containerized during the purging of the well. All waste water generated during the monitoring program will be treated and disposed of in accordance with all local, state, and federal statutes and regulations. The procedures outlined in Section 6.0 for waste water handling must be followed unless other methods have been pre-approved by the KDHE

Project Manager. NO waste water is to be stored on site for any reason.

3.3.4 Property Restoration

3.3.4.1 Any property damaged or destroyed during this monitoring program must be restored to its original condition within 30 calendar days after the damage or destruction occurred. All costs associated with the restoration are the responsibility of the Vendor unless the work is performed to restore the decommissioning of monitoring wells or other project related and pre-approved restoration.

3.3.4.2 If any professionally landscaped areas are disturbed during any activities, the Vendor must contract with a Landscape Professional to conduct the necessary repairs. Documentation of the contract will be required.

3.3.5 Renewal

3.3.5.1 All costs associated with monitoring renewals will be negotiated by a deadline set by the KDHE Project Manager. If costs are not negotiated by the deadline set by the KDHE Project Manager, KDHE may consider the scope of work for bid or utilize the state corrective action contract.

3.3.5.2 Price Adjustment: Upon completion of the current monitoring scope of work, existing line item prices may either remain at the current rate or may be adjusted based on the Federal Operating Cost Adjustment Factors (OCAF's). These rates are located in Attachment I of this document or the contractor can contact the KDHE Project Manager to obtain the adjustment factors allowable for the new contract period. Future contract adjustments will be based upon the previous years from the original start/stop dates of the contract. The maximum time allowable for the adjustment will be two years. The contractor shall furnish the revised figures in the standard bid sheets format. Individual line items cannot exceed original bid price plus the appropriate adjustment factor.

3.4 Miscellaneous - Additional Scopes of Work

3.4.1 KDHE may ask for additional scopes of work on sites in the monitoring program to address a variety of issues related to a particular site. All additional scopes of work will be negotiated with the KDHE Project Manager and the current monitoring Vendor for each facility by the deadline set by the KDHE Project Manager. All additional scopes of work will be assigned a deadline date for completion. If the completion deadline date is not met by the Vendor, KDHE reserves the right to deny partial or complete costs for the approved additional scope of work. Notifications must be made to the KDHE Project Manager, the designated District Office, the O/O, and the current property owner or lessee (See 3.3.2.13) prior to the initiation of any additional scope of work. KDHE reserves the right to deny partial or complete costs if the Notification requirement is not met. Sites may not be renewed with the current Vendor if approved additional scopes of work have not been

completed by the end of the monitoring scope of work or the deadline set by the KDHE Project Manager.

3.4.2 All field activities must be performed and reported per the applicable section in the most recent LSA RFP. Refer to the Field Investigation section of the LSA RFP. Field activities would include the following: Probe survey, drilling equipment and methods, drilling and sampling collection procedures, monitoring wells, waste disposal and borehole plugging, property access, and monitoring well surveying.

3.4.3 Kansas Risk Based Corrective Action (KRBCA)
All additional scopes of work for the KRBCA evaluation procedure must be performed in accordance with the current LSA RFP.

SECTION 4.0 DELIVERABLES

4.1 PRE-CONTRACT SUBMITTALS

The Vendor is required to submit, as a part of the proposal, each item requested in the order and format provided below. Certain items (*) will remain on file with KDHE and, once submitted, re-submittal will be necessary **only** when changes are made. The Vendor must specifically state each item omitted from the submittal package and include an explanation.

4.1.1 A cover letter from the Vendor

4.1.2 Two copies of properly completed monitoring bid proposal sheets (see EXHIBIT 2)

4.1.3 Copy of Insurance Certificate*

4.1.4 Resumes of all personnel proposed for the project, and current OSHA safety training certification of all personnel proposed to conduct field activities for the project*

4.1.5 Complete list of equipment*

4.1.6 Quality Assurance and Quality Control (QA/QC) plan*

4.1.7 Workers Compensation Log & Summary of Occupational Injuries & Illness (OSHA form G200)*

4.1.8 List of all sub-contractors with a description of their duties and, if applicable, copies of their OSHA safety training certificates. If the sub-contractor is to serve as the Vendor's Project Geologist or Sampling Technician, a copy of their resume is to be submitted to KDHE indicating their qualifications as outlined in Section 1.3.8, 1.3.9 or 1.3.10 respectively.

4.2 REPORTS

- 4.2.1 All reports will include a cover page with the following information: title, site name, site address, KDHE project code, report date, and the name of the person who prepared the report. The cover page must be stamped and signed by a Kansas Licensed Professional.
- 4.2.2 Two copies of each report will be submitted to the KDHE Project Manager and one copy will be submitted to the O/O. Reports must be stapled and not bound.
- 4.2.3 The Vendor will submit two copies of the first quarterly report within (8) weeks following the contract signature date. Subsequent monitoring reports will be submitted every 90 days following the first report submittal, or other frequency as stated in the SSI, for the duration of the monitoring program. Due dates for reports are firm. The initial due date may be negotiated with the Project Manager prior to the renewal of any contract.
 - 4.2.3.1 Report costs will be denied for reports received 1-30 days late. All costs associated with an event will be denied if the report is received more than 30 days late. All reports received after the due date will affect the Vendor's eligibility for future Trust Fund Work. If a report is not received the Vendor will jeopardize Vendor eligibility and be in violation of their contract with the O/O.
 - 4.2.3.2 Reports received with missing or inaccurate documentation may be rejected as determined by the KDHE Project Manager. If a report is rejected a new report will have to be resubmitted. Due dates will not be extended for resubmitted reports.
- 4.2.4 **SAMPLING REPORT FORMAT:**

The Sampling Report will include all information outlined below in the format and order described.

Each report will start with the Project Name, site address, KDHE Project Code, and the current sampling event number for the current scope of work (e.g. first of four).

SECTION 1.0 DISCUSSION

The discussion should be concise and site specific. Do not include information detailing standard operating procedures.

- 1) Provide a brief overview of the monitoring conducted for the present sampling event: e.g., date site sampled, number of groundwater samples collected, site observations, well condition, etc. Provide an explanation as to when or why a well was not sampled; e.g. plugged, not located, damaged, gauged only, dry, free product present etc.. The use and condition of any domestic wells in the site area must be mentioned in this section. The KDHE Trust Fund Domestic Well Contact Form must be filled out and submitted to KDHE after the first sampling event or when the contact information for a domestic well has changed (Attachment H).

- 2) Describe the contamination detected for the present sampling event: horizontal extent, degree, migration, product thicknesses (if applicable) and any impact or potential impact to sensitive environments, or public and private water supplies.
- 3) Observations from the current sampling event, which shall consist of a brief discussion of groundwater elevation, groundwater flow direction, and contaminant degree and distribution; note whether or not any changes have occurred since the last event, and if any wells need repairs or replacement. If there are any discrepancies with the well tag seal number or total depths for each well this must be mentioned in the discussion. Note any major analytical changes that may indicate cross contamination, a lab error, or warrant further investigations due to a potential new release at active facilities.

SECTION 2.0 TABLES

For each well that has previously or is currently approved to be sampled or gauged, include the following information for each of the eight most recent groundwater elevations and groundwater and petroleum product laboratory analysis. Present results from each sample point in chronological order with all available data being included within the tables for the eight most recent events. See example in EXHIBIT 1. All wells that are associated with the site that have been plugged or are not approved to be sampled should be listed noting the current status of the well. It should be noted in the report and on the groundwater elevation table, all wells that the screen interval is completely under the static water level. A summary of abbreviations for well designations other than “MW” should be noted if applicable.

TABLE 1.0

- 1.1) Well ID number.
- 1.2) The concentrations of each specified constituent in parts per billion (ppb).
- 1.3) The date each sample was collected.
- 1.4) The EPA testing method and laboratory analytical detection limit.

TABLE 2.0

- 2.1) Well ID number.
- 2.2) Elevations: top of casing, depth to water, depth to product, product thickness, etc.; corrected water elevation should be calculated and used if product is present.
- 2.3) The volume of water purged from the well prior to sampling.
- 2.4) The date the well was purged.
- 2.5) The type of product identified and measured amount.

TABLE 3.0

- 3.1) Well ID number.
- 3.2) Well Tag Seal # removed.
- 3.3) Well Tag Seal # installed.

SECTION 3.0 MAPS

All maps must be labeled with the titles provided. The site map from the final report (see EXHIBIT 1) should be used as the base map for locating wells and the first sampling event. A new site base map is required and must be drawn to scale; the scale must be such that 1 inch = 50 feet for smaller sites and 1 inch = 100 feet for larger sites. Include a north arrow, graphic scale, and legend on all maps. Legend items must differentiate between well types such as monitoring wells, plugged monitoring wells, domestic, and PWS wells. Only include items in the legend that occur at the site. The maps must be submitted in CAD format (or similar); hand drafted base maps are not acceptable. The maps must also include all wells that have been associated with the site noting their designation as lost, destroyed, plugged, etc. Maps must illustrate former and current UST/AST basins and pump island locations. Label other Trust Fund sites on the maps if applicable. **All maps must be updated if business name changes and/or site alterations have occurred due to construction activities.**

Figure 1 Groundwater Flow Map

A map representing the exact location of the site benchmark(s) and each well relative to the site benchmark. Label each well with the well ID #, the elevation of each well (casing), static groundwater elevation, labeled equipotential contours, and arrow(s) indicating predominant flowpaths and direction. Use all points measured when contouring except for anomalous points. Show flow line used for calculating hydraulic gradient.

Figure 2 Groundwater Isoconcentration Maps

Develop a Groundwater Isoconcentration Map for Total BTEX and any other map as directed on the SSI or by the KDHE Project Manager. Use the site map as a template. Sample points shall be labeled with concentrations in ppb. The isoconcentration map shall include the location of all sampling points. Isocontour lines shall be labeled with concentrations in ppb. Include map with the data plotted, but do not draw isocontours, if contaminant is detected in two or less wells. Other isoconcentration maps can be required at a later date, and should be bid as individual maps (see Section 6.0).

Figure 3 Separate Phase Product Isopach Map

The Isopach Map shall include the location of all monitoring wells or sampling points. Develop an Isopach Map any time separate phase product is detected. If product is detected in two or less

wells, product isopachs can be plotted on the Total BTEX Map as long as the projected product extent and thickness is clearly marked or shaded.

SECTION 4.0 DOCUMENTATION

Include all information requested in the following format. Do not reference or include in this section any discussion, tables, photographs, maps, or other documents that are included in this report or any other report.

Appendix 1 Laboratory Data

Include all analytical laboratory reports and Chain of Custody documents. All lab reports must include the following QA/QC data for all samples:

- 1) Calibration check against the true value or initial calibration every 20 samples.
- 2) Surrogate % recovery for each water sample.
- 3) Matrix spike for each constituent every 20 samples or each batch run.
- 4) Method blank for each batch or extraction.
- 5) Trip Blank for each shipping container, excluding product containers.

Reporting limits for all samples must be the Practical Quantification Limit (PQL) for that sample. Reporting limits set at the MCL are not acceptable. Include results of free product analyses (including laboratory chromatograph) if applicable.

Appendix 2 Field Notes

All field notes recording the sampling technicians name, product level and thickness, product description, initial static water level measurements, water level measurements prior to sampling, total depths in each well, the volume of water purged prior to sampling and field observations (e.g. odor, recharge rate, well head damages, well repairs performed). Field notes must indicate site arrival time, time each sample is collected and the departure time. If a well is not located, document the length of time and method used to locate wells that were approved for sampling or gauging.

Appendix 3 Domestic Well Contact Form

The Domestic Well Contact Form (Attachment H) must be filled out and attached to the first report. The form must be resubmitted anytime the contact information for a domestic well has changed. Updated forms may be emailed or faxed to Mr. Bill Reetz.

4.3 ADD SCOPE DELIVERABLES

- 4.3.1 Two copies of all data, reports, or other requested information must be submitted as specified by the Project Manager in the approval letter for each additional scope of work.
- 4.3.2 Add Scope deliverables received after the due date set by the KDHE Project Manager will be

penalized as determined by KDHE.

SECTION 5.0 REIMBURSEMENT

5.1 REIMBURSEMENT GUIDELINES

- 5.1.1 All Vendor invoices must be submitted to the O/O for payment.
- 5.1.2 Total reimbursement will not exceed the lesser of the actual costs incurred for each line item or the total cost for each line item in the Project Bid Proposal Sheet unit pricing.
- 5.1.3 The Vendor will only receive payment for work conducted and accepted in accordance with the specifications outlined in this document.
- 5.1.4 Payment to the Vendor will be prorated in accordance with actual work performed (i.e. if only 50% of the scheduled samples are required, 50% of the field hours will be reimbursed). The following categories will be prorated: On-Site Waste Handling and Treatment, Sampling Hours, and Analytical. Staff travel time and vehicle per/mile line items for an event will not be prorated.
- 5.1.5 The Vendor may submit invoices for reimbursement following the submittal of a completed sampling report. Reimbursement will be for 100% upon approval of the report by the KDHE Project Manager.
- 5.1.6 Reimbursements for reports received after the due date are indicated in 4.2.3.1.

5.2 DOCUMENTATION REQUIREMENTS

- 5.2.1 Vendor invoices submitted for reimbursement must use the same line item format as the Bid Proposal Sheets.

SECTION 6.0 PROPOSAL AND WORK SPECIFIC DEFINITIONS

6.1 PROPOSAL DEFINITIONS

6.1.1 INITIAL TASKS

Costs for some tasks will be reimbursable only once during the monitoring program. These will usually be line items needed for the first sampling event and report submittal, and may include costs associated with site reconnaissance to find the monitoring wells, preparation of a CAD site base map, collection and analysis of a product sample, an RLS survey, and other items KDHE has determined will be necessary on a site by site basis. Each task should be bid on the unit basis specified in EXHIBIT 2.

6.1.2 ISOCONCENTRATION MAP

This item shall include all costs associated with the preparation of an additional isoconcentration map to be included in a sampling event report. This item shall be on a per map basis and **should not** be included in the total proposed cost. This item will be used ONLY if KDHE changes the original scope to include an isoconcentration map not specified in the SSI in EXHIBIT 1. Costs for preparing all isoconcentration maps specified in the original scope must be included in the line item "Sampling Event Report".

6.1.3 LAB METHODS

This item shall state the EPA method(s) (see ATTACHMENT C) to be used for laboratory analysis of water samples.

6.1.4 LABORATORY NAME

This item shall name the KDHE-approved laboratory that will be performing the analyses of water and soil samples.

6.1.5 MOBILIZATION

This item shall include the cost for each vehicle(s) necessary to transport staff and equipment to conduct the monitoring. This item will be bid on a per mile basis. Staff time will not be included on this line item. Staff time for mobilization will have a separate staff travel time line item.

6.1.6 OTHER

This item shall include all costs not included in other items of the cost proposal sheet. If this category is used, the bidder must list each item and briefly explain its function.

6.1.7 PER DIEM

This item shall be a fixed price for one person to cover lodging and expenses. Per Diem will be approved only for each night an employee is required to stay away from their work station to complete the assigned task(s). This would be applicable for large sites that require two days to complete sampling, or where multiple sites are being sampled in the same vicinity. The per diem will be allocated to save on mobilization costs.

6.1.8 PRODUCT SAMPLES

This item shall include the total costs associated with the collection and analysis of the product sample(s)

(i.e.. labor, equipment, shipping, etc.). The purpose of the product sample(s) is to determine what petroleum products (kerosene, used motor oil, diesel, weathered/unweathered gasoline, fuel oil, jet fuel, etc.) are present, including any not previously known to be present, that may affect selection of an appropriate remediation design or alter the threat posed by the release being monitored. Provide the cost for analysis and all associated costs on a per sample basis.

6.1.9 SAMPLE ANALYSIS

This item shall include all costs associated with the analysis of water samples (i.e. equipment, shipping, etc.). All samples shall be analyzed in accordance with the criteria provided in this document for the constituents outlined in the bid sheet. This item must be bid on a per sample basis. If additional analyses are required, reimbursement will be on a per sample basis.

6.1.10 SAMPLING EVENT REPORT

This item will include all costs, including drafting of all maps specified in the SSI in EXHIBIT 1, clerical staff time, photocopies, mailing, etc. associated with preparation and submittal of the sampling event report as described in SECTION 4.2 of this RFP. This item will be bid on a Lump Sum basis for the number of events specified.

6.1.11 SAMPLING TECHNICIAN

This item shall include all costs associated with collecting the number of samples specified in EXHIBIT 2 (opening of well, water/product measurements, purging, recording, etc.). This item will be bid on a per hour basis.

6.1.12 STAFF TRAVEL TIME

This item will include all costs associated with staff time traveling to a site during the mobilization. This item will be bid on a per hour basis.

6.1.13 WASTE WATER HANDLING AND TREATMENT

This item shall include the cost to handle, treat and dispose of waste water generated during field activities. Methods for handling and treating development and purge water will be as follows: air stripping, granulated activated carbon or other treatment may be acceptable. The Vendor will properly dispose of development water when the Vendor obtains approval from the appropriate authority. **All applied methods must comply with local, state, and federal laws.** These handling and treatment methods are not approved for free product. NO water is to be stored on site.

ATTACHMENT A
KDHE MONITORING WELL DESIGN

STANDARD MONITORING WELL DESIGN

WELL HEAD PROTECTOR

Steel or PVC cover with water tight cap, set in the concrete pad. Should be equipped with a locking device to prevent tampering. Cover should provide adequate space to allow access to the well.

CONCRETE PAD

Should be a minimum of 2'x2'x4" thick to secure the protective cover, prevent pooling of water and vegetative growth around the well, and allow for placement of a surveyor pin.

IMPERVIOUS GROUT

The upper 20' of the well must be grouted with impervious grout as required by K.A.R. 28-30-2k and 6b (see next page for quotes)

SCREEN SEAL

A 2' layer of bentonite chips or pellets should be placed on the gravel pack to prevent infiltration of grout into the gravel pack.

GRAVEL PACK

The gravel pack should be sized to prevent infiltration of fines into the well. The source of the gravel pack material should be carefully determined to eliminate the possibility of contamination of the well during construction.

WELL CASING

Well casing shall terminate not less than one foot above ground surface. The following well casings are acceptable for monitoring well use.

2" I.D. PVC schedule 40 or thicker

4" I.D. PVC SDR 26 or thicker

5" I.D. PVC SDR 26 or thicker

Steel casing shall be 10 gauge or thicker

All casing materials must be connected without use of solvents, glues, or materials which would induce contamination into the well.

Some other casings are approved for well construction but are not as commonly used.

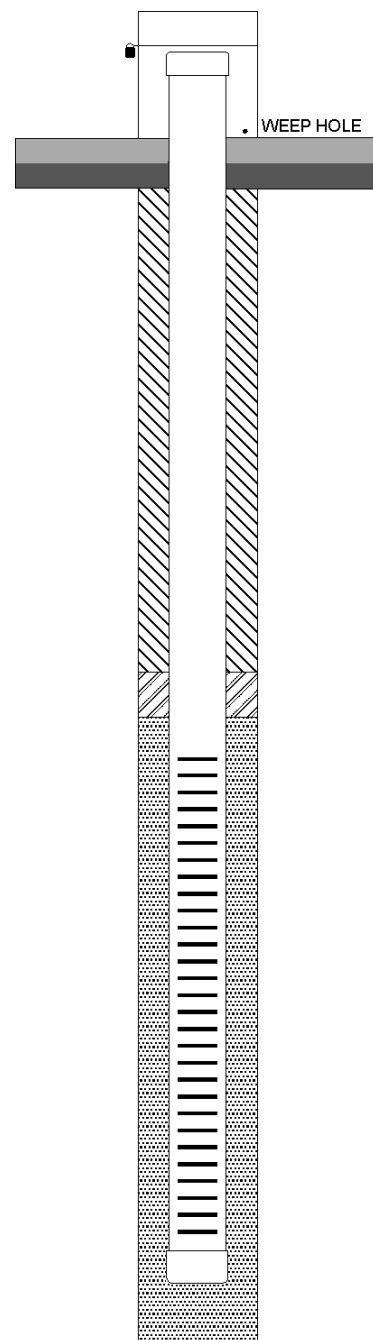
All casing materials must be selected so that incompatibility problems do not occur.

SCREEN

Wells must be equipped with manufactured well screen which provides adequate communication with the aquifer to provide a representative sample without allowing the sediments to enter the well.

CONTRACTOR LICENSING

All monitoring wells must be constructed by a licensed water well contractor as specified under K.A.R. 28-30-3. (See next page for quotes)



K.A.R. 28-30-2 (k) Grout

Grout means cement grout, neat cement grout, bentonite clay grout or other material approved by the department used to create a permanent impervious watertight bond between the casing and the undisturbed formation surrounding the casing or between two or more strings of casing.

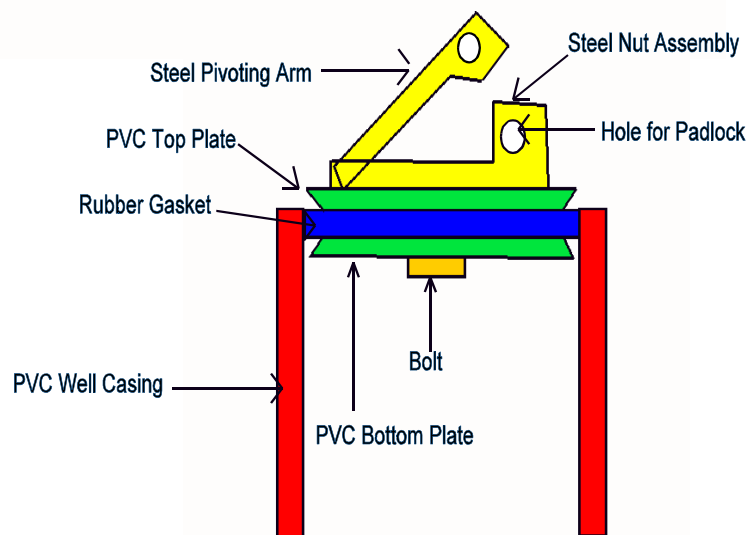
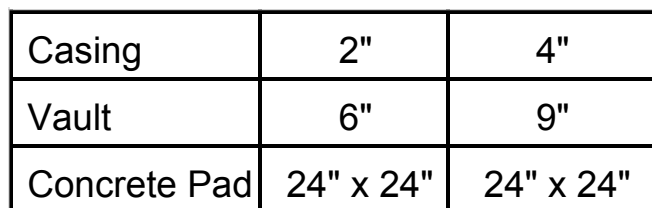
- (1) "Neat cement grout" means a mixture consisting of one 94 # bag of portland cement to 5-6 gallons of clean water.
- (2) "Cement grout" means a mixture consisting of one 94 # bag of portland cement to an equal volume of sand having a diameter no larger than 0.080 inches (2 millimeters) to 5-6 gallons of clean water.
- (3) "Bentonite clay grout" means a mixture consisting of water and commercial grouting or plugging sodium bentonite clay containing high solids such as that manufactured under the trade name of "volclay grout", or an equivalent as approved by the department.
 - (A) The mixture shall be as per the manufacturer's recommendations to achieve a weight of not less than 9.4 pounds per gallon of mix. Weighing agents may be added as per the manufacturer's recommendations.
 - (B) Sodium bentonite Pellets, tablets or granular sodium bentonite may also be used provided they meet the specifications listed in K.A.R. 28-30-2(k), (3), above.
 - (C) Sodium bentonite products that contain low solids, are designed for drilling purposes or that contain organic polymers shall not be used.

K.A.R. 28-30-6 (b) Grouting

- (1) Constructed or reconstructed wells shall be sealed by grouting the annular space between the casing and the well bore from ground level to a minimum of 20 feet or to a minimum of five feet into the first clay or shale layer, if present, whichever is greater. If a pitless well adapter or unit is being installed, the grouting shall start below the junction of the pitless well adapter or unit where it attaches to the well casing and shall continue a minimum of 20 feet below this junction or to a minimum of five feet into the first clay or shale layer whichever is greater.
- (2) To facilitate grouting, the grouted interval of the well bore shall be drilled to a minimum diameter at least three inches greater than the maximum outside diameter of the well casing. If a pitless well adapter or unit is being installed on the well's casing, the well bore shall be a minimum diameter of at least three inches greater than the junction diameter of the well casing through the grouted interval below the junction of the pitless well adapter or unit where it attaches to the well casing.
 - (c) If groundwater is encountered at a depth less than the minimum grouting requirement, the grouting requirement may be modified to meet local conditions if approved by the department.

K.A.R. 28-30-3 Licensing

- (a) Eligibility. To be eligible for a water well contractor's license an applicant shall:
 - (1) Have passed an examination conducted by the department; or
 - (2) Meet the conditions contained in subsection (c).
- (b) Application fees.
 - (1) Each application shall be accompanied by an application fee of \$ 10.00.
 - (2) Before issuance of a water well contractor's license, each contractor shall pay a license fee of \$ 100.00 plus \$ 25.00 for each drill rig operated by or for the contractor. These fees shall accompany the application and shall be by bank draft, check or money order payable to the Kansas Department of Health and Environment- water well licensure.
- (c) Reciprocity.
 - (1) Upon receipt of an application and payment of the required fees from a nonresident, the secretary may issue a license, providing the nonresident holds a valid license from another state and meets the minimum requirements for licensing as prescribed in K.S.A. 82a-1207, and any amendments thereto.
 - (2) If the nonresident applicant is incorporated, evidence shall be submitted to the Department of Health and Environment showing that the applicant meets the registration requirements of Kansas Secretary of State.
 - (3) Nonresident fees for a license shall be equal to the fee charged a Kansas contractor by the applicant's state of residence but shall not be less than \$ 100.00. The application fee and drill rig license fee shall be the same as the Kansas resident fees.



(Not to Scale)

MONITORING WELL DESIGN ADDITIONAL INSTRUCTIONS

FLUSH-MOUNT WELL HEAD COMPLETION:

K.A.R. 28-30-6 (e) does not allow well casing to be terminated less than one foot above finished ground surface. Because storage tank site investigations are often conducted in areas where completing monitoring well heads above grade is not practical, consideration must be given to completing flush-mount monitoring well heads.

If monitoring well must be completed with a flush-mount well head design, a waiver of K.A.R. 28-30-6 (e) must be requested in writing. The procedures for requesting a waiver of this regulation are described as follows:

- 1) Prior to the monitoring well installation, the written request must be submitted to the address indicated below.
- 2) The request must contain the following information:
 - a. facility name and street address
 - b. legal description of the property where the wells are proposed to be located.
 - c. number of wells to be installed with flush-mount well heads
 - d. reason(s) why the regulation should be waived
 - e. approximate depth to groundwater in the local area
 - f. the general geology or lithologies expected to be encountered in drilling
 - g. specifications and/or diagrams of the vault proposed to be installed including the manufacturer's name and any other descriptive information such as a manufacturer's trade sheet.
- 3) Wait for approval of the waiver request before completing monitoring wells.
- 4) When waivers are approved and monitoring wells are installed with a flush-mount wellhead design, the well head completion must be indicated accordingly in the lithologic section of the WWC-5 water well record form. The name of the KDHE contact person that approved the waiver must also be provided in the lithologic section of the WWC-5 form.

Any waiver of regulations applies only to the wells and information indicated in the written request. A verbal request for waiver of regulations may be approved on any additional wells needed for the same area or site. The verbal request must be directed to the phone number below.

MONITORING WELL GROUTING REQUIREMENTS:

K.A.R. 28-30-6, part (b) requires that constructed or reconstructed wells be sealed by grouting the annular space between the casing and the well bore from ground level to a minimum of 20 feet or to a minimum of five feet into the first clay layer, whichever is greater. Part (c) of the same regulation specifies if groundwater is encountered at a depth less than the minimum grouting requirement, the grouting requirement may be modified to meet local conditions if approved by the department.

If modifications to the grouping requirements are necessary solely because of shallow groundwater, a waiver or the regulations is not needed.; however, the reason for modifying the grouping requirements must be indicated accordingly on the WWC-5 water well record form. In situations where grouping modifications are required for reasons other than shallow groundwater, a waiver of K.A.R. 28-30-6(b) must be obtained following the same procedures as described for flush-mount well heads above.

Submit requests for waivers and direct any questions on well design regulations to:

Kansas Department of Health & Environment
Bureau of Water, Geology Section
1000 SW Jackson, Suite 420
Topeka, Kansas 66612-1367
Phone: (785)296-5522

ATTACHMENT B
SOIL BORING PLUGGING CRITERIA
K.A.R. 28-30-7(d)

**ARTICLE 30 - WATER WELL CONTRACTORS LICENSE;
WATER WELL CONSTRUCTION AND ABANDONMENT**

This article regulates the construction, reconstruction, treatment and plugging of water wells and sets forth procedures for the licensing of water well contractors as required by K.A.S. 82a-1201 to 82a-1215 and amendments thereto.

28-30-7 Plugging of abandoned wells, cased and uncased test holes.

- (d) Plugging of abandoned holes. If the hole penetrates an aquifer containing water with more than 1,000 mg/l, total dissolved solids or is in an area determined by the department to be contaminated, the entire hole shall be plugged with an approved grouting material from the bottom of the hole, up to within three feet of the ground surface using a grout tremie pipe or similar method. From three feet below ground surface to ground surface the plugged hole shall be covered over with compacted surface silts or clays; otherwise, the hole shall be plugged in accordance with the following paragraphs.
- (1) Plugging of abandoned cased test holes. The casing shall be removed if possible and the abandoned test hole shall be plugged with an approved grouting material from the bottom of the hole, up to within three feet of the ground surface, using a grout tremie pipe or similar method. From three feet below ground surface to ground surface the hole shall be covered over with compacted surface silts or clays. If the casing cannot be removed, in addition to plugging the hole with an approved grouting material the annular space shall also be grouted as described in K.A.R. 28-30-6 or as approved by the department.
- (2) Abandoned uncased test holes, exploratory holes or any bore holes except seismic or oil field related exploratory and services holes regulated by the Kansas Corporation Commission under K.A.R. 82-3-115 through 82-3-117. A test hole or bore hole drilled, bored, cored, or augered shall be considered an abandoned hole immediately after the completion of all testing, sampling or other operations for which the hole was originally intended. The agency or contractor in charge of the exploratory or other operations for which the hole was originally intended is responsible for plugging the abandoned hole using the following applicable method, within three calendar days after the termination of testing or other operations.
- (A) The entire hole shall be plugged with an approved grouting material from bottom of the hole, up to within three feet of the ground surface, using a grout tremie pipe or similar method.
- (B) From three feet below ground surface to ground surface the plugged hole shall be covered over with compacted surface silts or clays.
- (C) For bore holes of 25 feet or less, drill cuttings from the original hole may be used to plug the hole in lieu of grouting material, provided that an aquifer is not penetrated or the bore hole is not drilled in an area determined by the department to be a contaminated area.

WELL PLUGGING/ABANDONMENT REQUIREMENTS

The following requirements supplement section 28-30-7 (d) (1) of article 30 - Water Well Contractor's License: Water Well Construction and Abandonment, located on page 1 of Attachment B.

A) The following requirements will be mandatory for plugging monitoring wells that have **20 feet or greater of grout (including the bentonite plug)**:

- 1) The well head, concrete pad and protective cover (if above grade completion) must be removed.
- 2) The casing must be removed if possible. The well must then be filled with an approved plugging material. After the casing or casing void has been filled with an approved plugging material, the casing (if still in place) will be cut off to a level three (3) feet below ground surface. The remaining excavation may then be backfilled with native soils.
- 3) The property will be restored as near to the original condition subsequent to plugging.

B) The following requirements will be mandatory for plugging monitoring wells that have **less than 20 feet of grout (including bentonite plug)**:

- 1) The well head, concrete pad and protective cover (if above grade completion) must be removed.
- 2) Unless otherwise specified in the Site Specific (SSI) in Exhibit 1, the well must be drilled out to a minimum of twenty (20) feet or total depth, whichever is less. Over drilling must be performed using an auger with a minimum diameter equal to the original diameter of the soil boring.
- 3) The casing (if still present) must be removed and the boring filled with an approved plugging material to a level of three (3) feet below ground surface. The remaining excavation may then be backfilled with native soils.
- 4) The property will be restored as near to the original condition subsequent to plugging.

ATTACHMENT C
LABORATORY METHODS

APPROVED ANALYTICAL METHODS FOR ORGANIC COMPOUNDS

ANALYTE	SOLID AND HAZARDOUS WASTE METHODS		WATER METHODS	
	No.	PARAMETER	No.	PARAMETER
Benzene	8020*	Aromatic Volatile Organics	502.2	Volatile Org. Cmp., Purgeable Org. Cmp.
	8021*	Halogenated and Aromatic Volatiles	503.1	Volatile Aromatic & Unsat. Organic Cmp.
	8240	Volatiles	524.1	Purgeable Organic Compounds
	8260	Volatiles	524.2	Purgeable Organic Compounds
BTEX	8020*	Aromatic Volatile Organics	602	Purgeable Aromatics
	8021*	Halogenated and Aromatic Volatiles	624	Purgeables
	8240	Volatiles	1624	Volatile Organic Compounds
	8260	Volatiles		
1,2-DCA	8010*	Halogenated Volatile Organics	502.2	Volatile Org. Cmp., Purgeable Org. Cmp.
	8021*	Halogenated and Aromatic Volatiles	503.1	Volatile Aromatic & Unsat. Organic Cmp.
	8240	Volatiles	524.1	Purgeable Organic Compounds
	8260	Volatiles	524	Purgeable Organic Compounds
	8261	Vaccum Distillation in Combination with GC/MS		
Ethylbenzene	8020*	Aromatic Volatile Organics	502.1	Volatile Halogenated Organic Compounds
	8021*	Halogenated and Aromatic Volatiles	502.2	Volatile Org. Cmp., Purgeable Org. Cmp.
	8240	Volatiles	504.1	Microextraction and GC
	8260	Volatiles	524.1	Purgeable Organic Compounds
MtBE	8020*	Aromatic Volatile Organics	524.2	Purgeable Organic Compounds
	8021*	Halogenated and Aromatic Volatiles	601	Halogenated Volatile Organics
	8240*	Halogenated and Aromatic Volatiles	624	Purgeables
	8260	Volatiles	1624	Volatile Organic Compounds
Naphthalene	8021*	Halogenated and Aromatic Volatiles	502.2	Volatile Org. Cmp., Purgeable Org. Cmp.
	8100	Polynuclear Aromatic Hydrocarbons	503.1	Volatile Aromatic & Unsat. Organic Cmp.
	8250	Semivolatile Organic Compounds	524.2	Purgeable Organic Compounds
	8270	Semivolatile Organic Compounds	550	Polycyclic Aromatic Hydrocarbons
	8310	Polynuclear Aromatic Hydrocarbons	550.1	Polycyclic Aromatic Hydrocarbons
	8260	Volatiles	610	Polynuclear Aromatic Hydrocarbons
			625	Base/Neutrals & Acids
Toluene	8020*	Aromatic Volatile Organics	1625	Semivolatile Organic Compounds
	8021*	Halogenated and Aromatic Volatiles		
	8240	Volatiles		
	8260	Volatiles		

APPROVED ANALYTICAL METHODS FOR ORGANIC COMPOUNDS

ANALYTE	SOLID AND HAZARDOUS WASTE METHODS		WATER METHODS	
	No.	PARAMETER	No.	PARAMETER
Xylene	8020*	Aromatic Volatile Organics	502.2	Volatile Org. Cmp., Purgeable Org. Cmp.
	8021*	Halogenated and Aromatic Volatiles	503.1	Volatile Aromatic & Unsat. Organic Cmp.
	8240	Volatiles	524.1	Purgeable Organic Compounds
	8260	Volatiles	524.2	Purgeable Organic Compounds
EDB	8260	Volatiles	504.1	Microextraction and GC
	8011	Microextraction and GC with Electron Capture	555.1	Liquid-Liquid Extraction and GC with Electron Capture
	8021B	GC using Photoionization and/or Electrolytic Conductivity Detectors		
Polynuclear Aromatic Hydrocarbons	8310	Polynuclear Aromatic Hydrocarbons	610	Polynuclear Aromatic Hydrocarbons (High performance Liquid Chromatography)
	8270C	Semi Organic Compounds by GC/MS, Cap Column		
Lead	7420	AA Direct Aspiration	239.2	Atomic Absorption Spectrometry (Graphite Furnace)
	7421	Atomic Absorption, Furnace Technique	200.8	Inductively Coupled Plasma Mass Spectrometry
			200.9	Atomic Absorption Spectrometry-Stabalized Temperature (Graphite Furnace) Method
<p>* Water samples must be prepared using method 5030 (purge & trap extraction) if this test method is used.</p> <p>Air Sample Analysis:</p> <p>40 CFR Ch. 1 (7-1-91 Edition) Part 60, Appendix A, Method 18 (Flexible Bag Procedure)</p>				

ATTACHMENT D
MONITORING/OMM EVENT SUMMARY

Event Frequency: Annual_____ Semi-Annual:_____ Quarterly_____ Monthly_____

Signed:_____

This form is to be completed in the field and **MUST** accompany ALL invoices for Monitoring & OMM work.

ATTACHMENT E
MONITORING EVENT WORK NOTICE

MONITORING EVENT WORK NOTIFICATION FORM

Mail, fax, or email this form to the KDHE Project Manager and the KDHE District Office five (5) business days prior to conducting field work. The District number follows the "U" or "A" in the project code. Circle the district office.

KDHE, Storage Tank Section
Attn: Monitoring Unit
1000 SW Jackson, Suite 410
Topeka, KS 66612-1367
FAX: (785) 296-6190
Email: tflynn@kdhe.state.ks.us

KDHE SWDO #1
Attn: Doug Doubek
302 W. McArtor Rd
Dodge City, KS 67801
(620) 225-0596
FAX: (620) 225-3731

KDHE SCDO #2
Attn: Kyle Parker
130 South Market, 6th Floor
Wichita, KS
(316) 337-6020
FAX: (316) 337-6023

KDHE SEDO #3
Attn: Bill Thornton
1500 W. 7th
Chanute, KS 66720
(620) 431-2390
FAX: (620) 431-1211

KDHE NEDO #4
Attn: Dan Kellerman
800 West 24th St.
Lawrence, KS 66046
(785) 842-4600
FAX: (785) 842-3537

KDHE NCDO #5
Attn: Scott Lang
2501 Market Place
Salina, KS 67401
(785) 827-9639
FAX: (785) 827-1544

KDHE NWDO #6
Attn: Bill Heimann
2301 E. 13th
Hays, KS 67601
(785) 625-4005
FAX: (785) 625-4005

Company Name:_____

Sampling Technician:_____

Date Submitted:_____

Site Name:	KDHE Site Code:	Date Schedule:	Est. Start Time:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Signature of Vendor Representative:_____

This form must be received 3 days prior to the sampling event.

ATTACHMENT F
TIME SHEETS

KDHE TRUST FUND TIME SHEET LOG FOR FIELD ACTIVITIES

SITE NAME: _____
SITE ADDRESS: _____
KDHE SITE CODE: _____
CONSULTANT: _____
PROJECT MANAGER: _____

NOTE: This form is to be maintained during all field activities. All Workers must sign, date and list the time they arrive and depart from the site. This must be done each time a worker arrives or departs the site. A COPY OF THIS FORM MUST ACCOMPANY ALL REQUESTS FOR REIMBURSEMENT.

DATE	PRINT WORKERS NAME	WORKER'S SIGNATURE	JOB TITLE	TIME STARTED	TIME FINISHED	TOTAL TIME FOR DAY

I certify that the names and signatures above are those of the actual people who worked on the referenced site during the dates and times stated.

Signed: _____
 Consultant Project Manager

Date: _____

I certify that the information on this sheet is true and accurate to the best of my knowledge.

Signed: _____
 Owner/Operator or Authorized Representative

Date: _____

KDHE TRUST FUND TIME SHEET LOG FOR OFFICE ACTIVITIES

SITE NAME: _____
SITE ADDRESS: _____
KDHE SITE CODE: _____
CONSULTANT: _____
PROJECT MANAGER: _____

NOTE: This form is to be maintained during all office activities. All Workers must sign, date and list the time they work on the site project. A separate form must be maintained for each site project. A COPY OF THIS FORM MUST ACCOMPANY ALL REQUESTS FOR REIMBURSEMENT.

DATE	PRINT WORKERS NAME	WORKER'S SIGNATURE	JOB TITLE	TIME STARTED	TIME FINISHED	TOTAL TIME FOR DAY

I certify that the names and signatures above are those of the actual people who worked on the referenced site during the dates and times stated.

Signed: _____
 Consultant Project Manager

Date: _____

ATTACHMENT G
OWNER/OPERATOR STANDARD CONTRACT

AGREEMENT

This **AGREEMENT** entered into between _____
_____(OWNER/OPERATOR) hereinafter referred to as the O/O;
and _____ (VENDOR),
hereinafter referred to as the Vendor.

WHEREAS, the _____ (O/O) is in need of
Underground Storage Tank consulting and testing services at

_____ and

WHEREAS, the O/O has requested bids from qualified firms to provide
said services, and

WHEREAS, the Vendor is qualified to provide the required services.

1. The Vendor shall perform all services called for under Request for Proposal in accordance with the specifications called for in said RFP. A copy of said RFP is attached hereto and incorporated herein.
2. The O/O shall compensate the Vendor for its services under the terms and conditions of said RFP in the amount of \$_____, with payment to be made upon successful completion of the Project.
3. The provisions found in the contractual Provisions attached hereto and executed by the parties to the AGREEMENT, are hereby incorporated in this AGREEMENT and made a part hereof.

IN WITNESS WHEREOF, we have hereunto set our hands below on the date specified.

Date

Owner/Operator

Date

Vendor

CONTRACTUAL PROVISIONS

Important: This form contain mandatory contract provisions and must be attached to or incorporated in all copies of any contractual agreement. If it is attached to the Vendors standard contract form, then that form must be altered to contain the following:

“The provisions found in the Contractual Provisions, form # O/O 101, 7/92, which is attached hereto and executed by the parties to this agreement, are hereby incorporated in this contract and made a part hereof.”

The parties agree that the following provisions are hereby incorporated into the contract to which it is attached and made a part thereof.

4. TERMS HEREIN CONTROLLING PROVISIONS

It is expressly agreed that the terms of each and every provision in this attachment shall prevail and control over the terms of any other conflicting provision in any other document relating to and a part of the contract in which this attachment is incorporated.

5. AGREEMENT WITH KANSAS LAW

All contractual agreements shall be subject to, governed by, and construed to according to the laws of the State of Kansas.

6. ANTI-DISCRIMINATION CLAUSE

The Vendor should comply with the Kansas Act Against Discrimination (K.S.A. 44-1001 et seq.) and the Kansas Age Discrimination in Employment Act (K.S.A. 44-1111 et seq.) and to not discriminate against any person who performs work hereunder, because of race, religion, color, sex, physical handicap unrelated to such person's ability to engage in this work, national origin or ancestry, or age.

7. ACCEPTANCE OF CONTRACT

This contract shall not be considered accepted, approved or otherwise effective until the required bonds and insurance certificates are received by the O/O.

8. REPRESENTATIVE'S AUTHORITY TO CONTRACT

By signing this document, the representative of the Vendor hereby represents that he/she is duly authorized by the Vendor to execute this document on behalf of the Vendor and that the Vendor agrees to be bound by the provisions thereof.

9. RESPONSIBILITY FOR TAXES

The Owner/Operator will not be responsible for, nor indemnify a Vendor for, any federal, state or local taxes which may be imposed or levied upon the subject matter of this contract.

Date

Owner/Operator

Date

Vendor

ATTACHMENT H
DOMESTIC WELL SAMPLING CONTACT FORM

KDHE TRUST FUND DOMESTIC WELL CONTACT FORM**DATE:** _____**SITE NAME:** _____**KDHE SITE CODE:** _____**CONSULTANT:** _____**PROJECT MANAGER:** _____Form must be included in the first monitoring report
and faxed or e-mailed to Mr. Bill Reetz at:breetz@kdhe.state.ks.us

Fax: (785) 296-6190

Well I.D.	Well Owner's Name	Well Owner's Address	Well Owner's Phone Number	Well Usage*	Treatment**	Direction from Plume

* Describe the well usage (lawn and garden watering, drinking water, other, etc.)

** Describe treatment if any on the well (reverse osmosis, carbon vessels,U.V., etc.)

Note: Form is to be filled out each time the contact information for a domestic well has changed. The form is to be forwarded to the KDHE project manager if changes are made.

ATTACHMENT I
OPERATING COST ADJUSTMENT FACTORS

Operating Cost Adjustment Factors

<i>Year</i>	<i>Percent</i>
2000	2.0
2001	2.88
2002	4.4
2003	3.4
2004	3.9
2005	3.3
2006	4.2

EXHIBIT 1
SITE SPECIFIC INFORMATION

EXHIBIT 2

PROJECT BID PROPOSAL SHEETS